

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions,
and listings, of claims in the application:

LISTING OF CLAIMS:

1-24. (canceled)

25. (currently amended) A negative-resistance circuit,
comprising:

a field effect transistor;

a plurality of distributed constant lines respectively
connected to three terminals thereof of said transistor;

an output terminal connected to one of said three
terminals a gate of said transistor through one of said plurality
of distributed constant lines to provide a negative resistance;

an inductance element connected between said output
terminal and a ground potential, said inductance element being
adjustable so as to adjust [[a]] said negative resistance value;
and

another distributed constant line connected in
parallel to at least another one of the three terminals of said
transistor and in parallel with another one of said distributed
constant lines.

26. (previously presented) The negative-resistance circuit according to claim 25, wherein:

 said inductance element comprises yet another distributed constant line shorter than one-quarter wavelength at a desired frequency for connecting between a signal conductor of said inductance element and the ground potential.

27. (previously presented) The negative-resistance circuit according to claim 25, wherein:

 said yet another distributed constant line is a coplanar type one composed of a signal conductor and ground conductors disposed to sandwich said signal conductor with predetermined gaps therebetween, and

 said inductance element comprises a conductor piece which traverses only one of said gaps to connect said signal conductor with said ground conductor.

28. (currently amended) A negative-resistance circuit, comprising:

 a field effect transistor;

 a plurality of distributed constant lines respectively connected to three terminals thereof;

 an output terminal connected to one of said three terminals a gate of said transistor through one of said plurality of distributed constant lines to provide a negative resistance;

a capacitance element connected between said output terminal and a ground potential, said capacitance element being adjustable so as to adjust [[a]] said negative resistance value; and

another distributed constant line connected ~~in parallel~~ to at least another one of the three terminals of said transistor and in parallel with another one of said distributed constant lines.

29. (previously presented) The negative-resistance circuit according to claim 28, wherein:

said capacitance element comprises yet another distributed constant line which is branched from a signal conductor of said capacitance element, has an opened leading end, and is shorter than one-quarter wavelength at a desired frequency.

30. (previously presented) The negative-resistance circuit according to claim 28, wherein:

said yet another distributed constant line is a coplanar type one composed of a signal conductor and ground conductors disposed to sandwich said signal conductor with predetermined gaps therebetween, and

said capacitance element comprises a conductor piece which is branched from said signal conductor and has an opened leading end.

31. (canceled)

32. (previously presented) The negative-resistance circuit according to claim 25, wherein:

one of said plurality of distributed constant lines is a distributed constant line which is longer than one-quarter wavelength and shorter than one-half wavelength at a desired frequency, and has a leading end connected to a ground potential.

33. (previously presented) The negative-resistance circuit according to claim 25, wherein:

one of said plurality of distributed constant lines is a distributed constant line which is shorter than one-quarter wavelength at a desired frequency, and has an opened leading end, and

others of said plurality of distributed constant lines and said another distributed constant line are distributed constant lines each having a leading end short-circuited to a ground potential.

34. (previously presented) The negative-resistance circuit according to claim 28, wherein:

one of said plurality of distributed constant lines is a distributed constant line which is longer than one-quarter wavelength and shorter than one-half wavelength at a desired frequency, and has a leading end connected to a ground potential.

35. (previously presented) The negative-resistance circuit according to claim 28, wherein:

one of said plurality of distributed constant lines is a distributed constant line which is shorter than one-quarter wavelength at a desired frequency, and has an opened leading end, and

others of said plurality of distributed constant lines and said another distributed constant line are distributed constant lines each having a leading end short-circuited to a ground potential.

36-37. (canceled)

38. (currently amended) The negative-resistance circuit according to claim 25, wherein:

~~said transistor is a field effect transistor, and~~

said terminal to which said distributed constant lines are connected in parallel is a source of said field effect transistor.

39. (currently amended) The negative-resistance circuit according to claim 28, wherein:

~~said transistor is a field effect transistor, and~~
said terminal to which said distributed constant lines are connected in parallel is a source of said field effect transistor.

40. (canceled)

41. (currently amended) The negative-resistance circuit according to claim 38, wherein:

~~said output terminal of said negative resistance circuit is disposed through a distributed constant line connected to a gate of said field effect transistor, and wherein:~~

 said negative-resistance circuit further comprises:
 a bias power source for supplying said gate with a predetermined DC voltage; and
 a resistor connected between said bias power source and said distributed constant line connected to said gate.

42. (currently amended) The negative-resistance circuit according to claim 39, wherein:

~~said output terminal of said negative-resistance circuit is disposed through a distributed constant line connected to a gate of said field effect transistor, and wherein+~~

 said negative-resistance circuit further comprises:

 a bias power source for supplying said gate with a predetermined DC voltage; and

 a resistor connected between said bias power source and said distributed constant line connected to said gate.

43. (canceled)

44. (previously presented) An active filter comprising:

 the negative-resistance circuit according to claim 25;
and

 a resonator connected in series with said negative-resistance circuit.

45. (previously presented) An active filter comprising:

 the negative-resistance circuit according to claim 28;
and

 a resonator connected in series with said negative-resistance circuit.

46. (canceled)